

TR-6s / TR-8S SysEx Formats

M00	M01	M02	M03	M04	M05	M06	M07	M08	M09	M0A	M0B	M0C	M0D	M0E	M0F	M10	M11
Roland TR - 8s / TR - 6s SysEx Format																	
Data Transmission																	
F0	41	10	00	00	00	45	12	10	59	18	10	00	01	6E	F7		
SysEx Start																	
	Roland ID																
		Device ID,	Manual indicates 10-1F are valid, default 10														
			Roland four byte model ID (45 = TR-8s, 6D = TR-6s)														
							Data Tx = 12										
								Start Memory Address - always 4 bytes									
								A3	A2	A1	A0	Data - 1 to 256 bytes, two in this example					
								Data included in checksum ->				Checksum					
								Sum data, mod 128, subtract from 128, mod 128									
																SysEx End	
Data Request																	
F0	41	10	00	00	00	45	11	10	59	18	10	00	00	00	02	6E	F7
SysEx Start																	
	Roland ID																
		Device ID,	Manual indicates 10-1F are valid, default 10														
			Roland four byte model ID (45 = TR-8s, 6D = TR-6s)														
							Data req = 11										
								Start Memory Address - always 4 bytes				L3	L2	L1	L0		
								A3	A2	A1	A0	Bytes requested - always 4 bytes					
								Data included in checksum ->				Checksum					
								Sum data, mod 128, subtract from 128, mod 128									
																SysEx End	
Note, the example Data Request would generate the Data Transmission shown (with the current data values)																	

TR-8s / TR-6s Memory Overview

TR-8s / TR-6s Memory Overview
(work in progress)

	A3	A2	A1	A0		
Unknown	00	01	00	00	User Names 01-32? More research here	
System Data	00	03	xx	xx	Rx edit data, Tx edit data, etc	
General	01	xx	xx	xx	Current kit, current pattern, next pattern, Run status, beat, etc.	
Kit - General	10	##	00	xx	## is kit number 0 - 7F (1-128)	
Kit - Reverb	10	##	01	xx		
Kit - Delay	10	##	02	xx		
Kit - Mfx	10	##	03	xx		
Kit - Controls	10	##	06	xx		
Kit - Instrument	10	##	1\$	xx	\$ is track	
					TR-6s	TR-8s
			_0		BD	BD
			_1		SD	SD
			_2		LT	LT
			_3		HC	MT
			_4		CH	HT
			_5		OH	RS
			_6			HC
			_7			CH
			_8			OH
			_9			CC
			_A			RC
Kit - Inst Fx	10	##	2\$	xx	\$ as above	
Pattern	2#	##	xx	xx	20 00 pattern 0 20 10 pattern 1 2F 70 pattern 127 LSB is pattern # mod 8 x 10h (count 00-7F, not 1-128) MSB is pattern # / 8 + 20h	
Instrument	??				Haven't done work here	
					May be other sections for samples, etc.	
Special ?	50	xx	xx	xx	DT to 50 00 00 13 replies with SW version + additional data	

TR-8s / TR-6s Messages

TR-8s / TR-6s Messages
(work in progress)

Section	Item	MSB	M_h	M_l	LSB	Bytes	Note
		M08	M09	M0A	M0B		
▼ Message Format							
Message Format	Prefix				F0	1	
Message Format	Roland ID				41	1	Roland ID,
Message Format	Device ID				10	1	10-1F = 17-32
Message Format	Roland four byte model ID	00	00	00	##	4	8s - 45 6s - 6D
Message Format	Data Transmission or Data Request				##	1	12 - Data Transmission 11 - Data Request
Message Format	Data Address	A3	A2	A1	A0	4	Data address
Message Format	-- Data Transmission Only				Dn	1+	1 to 256 bytes
Message Format	-- Data Request Only	L3	L2	L1	L0	4	Length requested (always four bytes)
Message Format	Checksum				Cs	1	Includes all address and data bytes
Message Format	Suffix				F7	1	
▼ System							
System	Rx Edit Data	00	03	00	3B	1	Rekurs when editor active
System	Tx Edit Data	00	03	00	36	1	Rekurs when editor active
▼ General							
General	Kit	01	00	00	00	1	Not captured by load?
General	Pattern	01	00	00	01	1	
General	Next pattern	01	00	00	02	1	
General	Beat	01	00	00	07	1	During run, 0-F
General	Run	01	00	00	08	1	Appears on run
General	Scatter ??	01	00	00	09	1	Appears on run
General	Button action flag?	01	00	00	13	1	Substep (0,1), accent (0)
General	Button Action Flag ???	01	00	00	16	1	Appears on run & button action
General	Sub step value	01	00	00	19	2	0-3 = 1/2, 1/3, 1/4, Flam
General	Tempo	01	00	00	39	4	40-300 * 10 -> Rn
General	Count In / Out	01	00	00	3D	1	Appears on remote run or stop
General	Master Fx sw display	01	00	00	40	1	0-1, follows kit Mfx
▼ Kit							
Kit	Kit Name	10	##	00	00	16	## is kit number 00 - 7F (1-128)
Kit	Kit Level	10	##	00	10	1	-Inf to +10.0, non-linear
Kit	BD Color	10	##	00	42	1	00-0A
Kit	SD Color	10	##	00	43	1	
Kit	Last color 6s OH	10	##	00	47	1	
Kit	Last color 8s RC	10	##	00	4C	1	
▼ Kit-Reverb							
Kit-Reverb	Type	10	##	01	00	1	
Kit-Reverb	Time	10	##	01	01	2	0 - 255
Kit-Reverb	Level	10	##	01	03	2	0 - 255
Kit-Reverb	Pre-delay	10	##	01	05	1	0 - 100
Kit-Reverb	Low Cut	10	##	01	06	1	

TR-8s / TR-6s Messages

Section	Item	MSB	M_h	M_l	LSB	Bytes	Note
		M08	M09	M0A	M0B		
Kit-Reverb	High Cut	10	##	01	07	1	
Kit-Reverb	Density	10	##	01	08	1	
▼ Kit-Delay							
Kit-Delay	Type	10	##	02	00	1	
Kit-Delay	Sync	10	##	02	01	1	
Kit-Delay	Level	10	##	02	02	2	
Kit-Delay	Time	10	##	02	04	2	
Kit-Delay	Feedback	10	##	02	06	2	
Kit-Delay	Reverb Send	10	##	02	1C	2	
▼ Kit-Mfx							
Kit-Mfx	Type	10	##	03	00	1	Always sends full report
Kit-Mfx	Switch	10	##	03	01	1	0-1
Kit-Mfx	Ctrl Assignment	10	##	03	26	1	
Kit-Mfx	First controls	10	##	03	27	2	
▼ Kit-Controls							
Kit-Controls	Kit Ctrl	10	##	06	00	1	
Kit-Controls	BD Ctrl	10	##	06	01	1	
Kit-Controls	SD Ctrl	10	##	06	02	1	
Kit-Controls	Last Ctrl 6s	10	##	06		1	
Kit-Controls	Last Ctrl 8s	10	##	06		1	
▼ Kit - Instrument							
Kit - Instrument	Instrument	10	##	1@	00	4	@ is track, see mem map
Kit - Instrument	Tune	10	##	1@	04	2	-128 - + 127
Kit - Instrument	Decay	10	##	1@	06	2	0 - 255
Kit - Instrument	Inst Level	10	##	1@	08	2	0 - 255
Kit - Instrument	Inst Gain	10	##	1@	0A	2	Inf, -40 to +40 (max 0A0A)
Kit - Instrument	Pan	10	##	1@	0C	2	L127 - R127
Kit - Instrument	Reverb Send	10	##	1@	0E	2	0-255
Kit - Instrument	Delay Send	10	##	1@	10	2	0-255
Kit - Instrument	LFO Dest	10	##	1@	13	1	
Kit - Instrument	LFO Depth	10	##	1@	14	2	
Kit - Instrument	Attack	10	##	1@	35	2	
▼ Kit - Inst Fx							
Kit - Inst Fx	Inst Fx	10	##	2@	00	1	Always sends full report
Kit - Inst Fx	Parameter 1	10	##	2@	09	2	
▼ Pattern							
Pattern	Pattern Name	2x	xx	00	00	16	x xx see memory map
Pattern	Scale	2x	xx	00	16	1	0-3: 8(t), 16(t), 16, 32
Pattern	Shuffle	2x	xx	00	23	2	Centered on 08 08
Pattern	Tempo	2x	xx	00	39	4	
Pattern	Variation	2x	xx	00	41	2	0F 0F
Pattern	Last step A ...	2x	xx	00	43	1	0-F
Pattern	Last step H	2x	xx	00	4A	1	0-F
Pattern	Flam spacing	2x	xx	00	5B	1	

TR-8s / TR-6s Messages

Section	Item	MSB	M_h	M_l	LSB	Bytes	Note
		M08	M09	M0A	M0B		
Pattern	Scatter Type	2x	xx	00	5C	1	
Pattern	Scatter Depth	2x	xx	00	5D	1	
Pattern	Auto fill	2x	xx	00	7E	1	0-1
Pattern	Fill cycle	2x	xx	00	7F	1	0-5 = 32, 16, 12, 8, 4, 2
Pattern	Fill pattern	2x	xx	01	00	1	0-9 = A-H, 1, 2
Pattern	Last step 1	2x	xx	01	01	1	0-F
Pattern	Last step 2	2x	xx	01	02	1	0-F
Pattern	Accent Level	2x	xx	01	04	2	0F-0F
▼ Pattern - Variation							
Pattern - Variation	Accent + ?	2x	x1	00	00		
Pattern - Variation	Instrument Report 1	2x	x1	00	08	8	BD Step 1, Variation 1
Pattern - Variation		2x	x1		10	8	BD Step 2, Variation 1
Pattern - Variation		2x	x1		18		
Pattern - Variation		2x	x1				
Pattern - Variation		2x	x1				BD Step 16, Variation 1
Pattern - Variation	Instrument Report 2	2x	x1	0C	08		BD Step 1, Variation 1
Pattern - Variation	Track Report 1	2x	x1	17	08		Step 1, Variation 1
Pattern - Variation	Track Report 2	2x	x1	18	00		Step 1, Variation 1
Pattern - Variation							
▼ Other							
Other		50	00	00	13	8	Initial editor connect Version, add'l data, 8 bytes
Other		50	00	00	15	1	Initial editor connect
▼ (blank)							

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(work in progress)

Accent Report	20	1	0	0	Accent	Accent	Trigger?	Trigger?
Inst Report 1	20	1	0	8	SubProb Prob	Alt Sub/flam	Velocity	
Inst Report 2			0C	8	CTRL	Decay	Tune	
Track Report	20	1	17	8	Delay Time	Delay Lvl	Rev Lvl	
	20	1	18	0	Mfx Ctl	Mfx Sw	Dly Fdbk	
			1	Flam				
			2	1/2				
			3	1/3				
			4	1/4				

Items that should be in memory

Track

REVERB [LEVEL] knob
 DELAY[LEVEL]knob
 DELAY[TIME]knob
 DELAY[FEEDBACK]knob
 MASTER FX [ON] switch
 MASTER FX [CTRL] knob
 Accent
 Trigger

Instrument

[TUNE] knob of each instrument
 [DECAY] knob of each instrument
 [CTRL] knob of each instrument
 Alt inst
 Sub / Flam
 Prob / SubProb